

11 MAY 2005

INTERNATIONAL SEARCH REPORT

International application No.

PCT/NZ2003/000251

A. CLASSIFICATION OF SUBJECT MATTERInt. Cl. ⁷: F16D 41/07, 41/12, 41/30, 43/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

DWPI: IPC: F16D with keywords including: clutch, freewheel, one way, pawl, number, bias and worm

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| X | Derwent Abstract Accession No. 93-225259/28, Class Q63, SU 1746086 A1 (CHELY BRANCH TRACTOR AREIC EQUIP ASSOC) 7 July 1992 abstract | 1, 2 |
| X | EP 1031752 A1 (BORG WARNER INC.) 30 August 2000 Whole document especially column 4, lines 50-57 | 1, 2 |
| X | Derwent Abstract Accession No. 94-024232/03, Class Q63, SU 1784784 A1 (VLADIMIR POLY) 30 December 1992 abstract | 5 |

☒ Further documents are listed in the continuation of Box C☒ See patent family annex

| | |
|---|--|
| * Special categories of cited documents: | |
| "A" document defining the general state of the art which is not considered to be of particular relevance | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention |
| "E" earlier application or patent but published on or after the international filing date | "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone |
| "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art |
| "O" document referring to an oral disclosure, use, exhibition or other means | "&" document member of the same patent family |
| "P" document published prior to the international filing date but later than the priority date claimed | |

Date of the actual completion of the international search
24 February 2004Date of mailing of the international search report
26 FEB 2004Name and mailing address of the ISA/AU
AUSTRALIAN PATENT OFFICE
PO BOX 200, WODEN ACT 2606, AUSTRALIA
E-mail address: pct@ipaustalia.gov.au
Facsimile No. (02) 6285 3929Authorized officer

KURT TOBLER
Telephone No : (02) 6283 2469

INTERNATIONAL SEARCH REPORT

International application No.

PCT/NZ2003/000251

C (Continuation).

DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| X | DE 4001137 C (WALTERSCHEID J GMBH) 25 July 1991 Whole document | 5 |
| P, A | US 2003/0188947 A1 (FITZ et al.) 9 October 2003 Whole document | 3, 4 |
| A | DE 2551003 A1 (ROTZER oHG SPEZIALFABRIK FUR SEILWINDEN) 18 May 1977 whole document | 13 |

INTERNATIONAL SEARCH REPORT

International application No.
PCT/NZ2003/000251

Box I Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos :
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos :
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos :
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

Box II Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:
See additional sheet.

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest ☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/NZ2003/000251

Supplemental Box

(To be used when the space in any of Boxes I to VIII is not sufficient)

Continuation of Box No: II

The international application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept. In coming to this conclusion the International Searching Authority has found that there are different inventions as follows:

1. Claims 1-4 are directed to a one-way clutch having pawls and pockets of different amounts. It is considered that pawls and pockets of different amounts comprises a first "special technical feature".
2. Claims 5-12 are directed to a one-way clutch having directionally dependant biasing means. It is considered that directionally dependant biasing means comprises a second "special technical feature".
3. Claims 13-16 are directed to a one-way clutch including a geared transmission. It is considered that a geared transmission comprises a third "special technical feature".

The feature common to all of the claims is a one-way clutch. However this common feature is generic in the art. Consequently the common feature does not constitute "a special technical feature" within the meaning of PCT Rule 13.2, second sentence, since it makes no contribution over the prior art. Since there exists no other common feature which can be considered as a special technical feature within the meaning of PCT Rule 13.2, second sentence, no technical relationship within the meaning of PCT Rule 13 between the different inventions can be seen. Consequently it appears that a posteriori, the claims do not satisfy the requirement of unity of invention.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/NZ2003/000251

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

| Patent Document Cited in Search Report | | | Patent Family Member | | | | |
|--|------------|---------|----------------------|----|------------|----|------------|
| SU | 1746086 | | | | | | |
| EP | 1031752 | AU | 41760/97 | CA | 2264162 | CA | 2322535 |
| | | CA | 2340569 | EP | 0923680 | EP | 1066477 |
| | | EP | 1108914 | EP | 1143161 | EP | 1265000 |
| | | EP | 1388683 | JP | 2000274457 | JP | 2001349350 |
| | | US | 5853073 | US | 5947245 | US | 5954174 |
| | | US | 5971122 | US | 6062362 | US | 6109410 |
| | | US | 6125979 | US | 6338403 | WO | 9810203 |
| | WO | 9945289 | | | | | |
| SU | 1784784 | | | | | | |
| DE | 4001137 | | | | | | |
| US | 2003188947 | WO | 03087603 | | | | |
| DE | 2551003 | | | | | | |
| END OF ANNEX | | | | | | | |